SurgeArrest

Thank you for selecting APC SurgeArrest! It has been designed to provide the highest value of protection against spikes and EMI/RFI noise on electrical lines.

Save these instructions for future reference!

⚠ SAFETY PRECAUTIONS

- ► Do not install this device during a lightning storm!
- ► The SurgeArrest is intended for a cool (0-40 °C) and dry indoor environment with relative humidity of 0-95% non-condensing. Do not install the SurgeArrest near heaters or in a hot environment. Do not install the SurgeArrest in an excessively moist or potentially wet environment, for example: near bathtub, sinks, pools etc.
- ► The SurgeArrest is intended to supply electric power to computers, peripheral, and electronic equipment. The SurgeArrest is rated for 250 VAC, 50/60 Hz, and 10 Amps maximum.
- ► For best protection against spikes induced by lightning storms, it is hightly recommended that the SurgeArrest surge suppressor be grounded to earth.

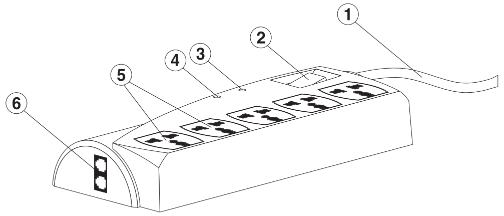

Figure 1

Product Features

Please refer to Figure 1 for the following information and instructions.

① The **Power Cord** is designed for a three wire grounded system.

② Each SurgeArrest has a built-in recessed ON/OFF **Power Switch** to allow the user to activate electricity to connected equipment such as computers, printers, terminals etc.

③ The **Protection Working** ⚠ indicator (green) is illuminated as long as the thermal fuse is intact. If this indicator is extinguished, the product disconnects from the utility line. In this case, return this unit to APC for repair or replacement.

④ The **Building Wiring Fault** indicator (red) is lit when there is either no ground circuit, a reversed polarity in the building wiring, or the neutral circuit is overloaded. If it lights, consult a qualified electrician to examine the building wiring.
Note: When the SurgeArrest is fully loaded, this indicator may flicker. This is normal and may not be indicative of a fault.

⑤ Five **Safety Outlets** are provided for your convenience. These outlets accept a number of different plugs, including those in use in Continental Europe (CEE7/7 and CEE7/16), Australia (AS3112), the United Kingdom (BSI1363), Japan (JIS 8303), and China (GB2099.1).
Note: The rated current of each plug should be 10A or less.

⑥ **Telephone Protector/ Network Port Protector**
Model Per5T-CH is the only model with a built-in one line (two wire) telephone protector. A six foot telephone extension cord is provided.
Model Net5N-CH is the only model with a built-in Network Port Protector (for 10BaseT, 100BaseT, 100BaseTX, 100BaseT4, 100VG-AnyLAN, & Token Ring interface cards & HUBs).
Note: Never connect an ISDN line to a SurgeArrest.

⑦ Each SurgeArrest is equipped with a 10 Amp **circuit breaker** to protect against electrical power overload. Button will pop up in the event of an overload. If this happens, unplug at least one piece of equipment, and reset button.

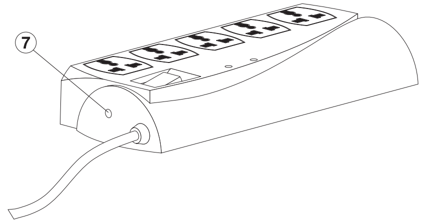

Figure 2

Installation Instructions

1. Turn OFF Power Switch ②. The switch lever marked with the "O" should be down.
2. Connect the Power Cord ① to a 250VAC receptacle. It is highly recommended that a grounded receptacle be used. Please note that ungrounded surge protectors do not provide effective surge protection between line and ground. Check local electrical laws governing grounding practices.
3. Connect power cords of electrical equipment to be protected into the Outlets on the SurgeArrest.
4. For model Per5T-CH, protect your telephone, fax machine, or modem by connecting the supplied telephone extension cord to the telephone jack on the wall and connecting the other end to the jack marked "IN" on the SurgeArrest. Connect your telephone equipment cord to the jack marked "OUT" on the SurgeArrest.
5. For model Net5N-CH, protect your local area network card by connecting the LAN cable from the Concentrator HUB to the "IN" jack on the SurgeArrest. Connect one end of the supplied cable to the network card jack and connect the other end to the "OUT" jack on the SurgeArrest.
6. Turn ON the SurgeArrest power switch.
7. Turn ON connected equipment.

Note: Installation example is shown in Figure 3.

132 mm (5.2 in)
Wall Mounting Template

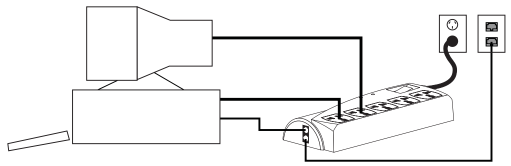

Figure 3

Mounting the SurgeArrest on a wall

The SurgeArrest has two mounting holes located on the bottom of the unit. These holes were designed to hook on to screw heads or nail heads. The spacing between the center of the screw holes is 11.43 cm. For best results, when fastening screws or nails into a wall, leave about 3.5 mm spacing between the wall and the bottom flange of the screw or nail.

Specifications

Unless otherwise stated, ratings are based on ambient temperature of 20°C.
Operating Temperature Range: 0°C to 40°C
Operating Voltage: 250 VAC (230 VAC nom.), 50/60 Hz
Operating Relative Humidity: 0 - 95% non-condensing
Safety Approval: CCEE
For more a detailed specification, contact APC.

Table 1: AC Surge Performance Ratings

Parameter/Model	Personal	Network
EMI/RFI Noise Rejection (100kHz to 10MHz)	15-55 dB	30-70 dB
Cat. A Normal Mode Let Through Voltage % of 6kV pulse	<8.5%	<1.5%
Total Energy Capacity	315J	630J
Peak Surge Current (with 8x20µs pulse) Normal Mode	5.5kA	11kA
Peak Surge Current (with 8x20µs pulse) Common Mode	11kA	22kA

Table 2: Telephone Protector Ratings

Parameter/Model	Personal	Network
Operating Voltage	260VDC	—
Peak Surge Current (with 8x20µs pulse) All Modes	4500A	—
Number of Lines Protected	1	—
Connector Type	RJ11	—
Series Resistance	6-12W	—

Table 3: Network Protector Ratings

Parameter/Model	Personal	Network
Operating Voltage	—	8VDC
EIA/TIA 568 Performance	—	Category 5
Connector Type	—	RJ45

Limited Product Warranty

American Power Conversion offers a limited two year warranty on SurgeArrest surge suppressors.
APC warrants its products to be free from defects in materials and workmanship under normal use and service for two years for the original purchaser. Its obligation under this warranty is limited to repairing or replacing, at its sole option, any such defective products. To obtain service under warranty you must obtain a Returned Material Authorization (RMA) number from APC or an APC service center with transportation charges prepaid and must be accompanied by a brief description of the problem and proof of date of purchase. This warranty applies only to the original purchaser.

Customer Service/Technical Support

APC China
RM 513 Haowei Building
No. 25 Beitaipingzhuang Road, Haidian District
Beijing, 100088
People's Republic of China
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American Power Conversion
132 Fairgrounds Road
West Kingston, Rhode Island 02892
USA

Internet Address: http://www.apcc.com

Part Number: 990-0070 Rev. 2 5/99

SurgeArrest

谢谢您选择 APC SurgeArrest！本产品的设计可提供最高价值的保护，那就是在电路上防止尖峰电压电磁波/射频噪音干扰。

请保存这些使用说明，以备将来参考！

⚠ 安全防范

- ► 请勿在雷雨天安装！
- ► SurgeArrest 适于在 0 °C 到 40 °C 之间清爽乾燥的室内环境和 0-95% 非冷凝状态的相对湿度环境下使用。请勿在加热器附近或高温环境下安装 SurgeArrest。请勿在非常潮湿或可能潮湿的环境下安装 SurgeArrest，例如：在浴缸、清洗池、水池附近等等。
- ► SurgeArrest 专门为计算机、计算机系统的周边设备和电子设备提供电源。SurgeArrest 的额定值为 250 VAC、50/60 Hz、以及最大 10 Amps 。
- ► 为在雷雨天获得最佳的防止尖峰电压的保护效果，本公司极力推荐 SurgeArrest 浪涌抑制器接地的安装方式。

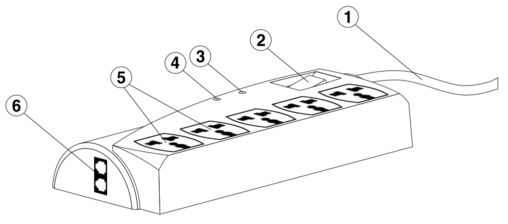

图 1

产品特性

欲知下述信息和指令，请参阅“图 1”。

① 本产品的**电源线**是为三线接地系统设计的。

② 每个 SurgeArrest 都有一个内置的凹进的**打开/关闭电源开关**，用户可以使用此开关将电源接通到诸如计算机、打印机、终端系统等设备。

③ 只要热敏保险丝没有断，**保护工作指示灯** ⚠（绿色）就会持续亮着。如果该指示灯熄灭，说明本产品未与应用设备电路连接上。在这种情况下，请将本产品退回 APC 修理或替换。

④ 当没有接地电路，也就是在建筑配线中发生反相；或零线超负荷，则**建筑配线故障指示灯**（红色）就会点亮。如果该指示灯点亮，则需要请合格的专业电工检查建筑配线。
注意：当 SurgeArrest 满负荷时，该指示灯可能会闪烁。这种现象是正常的，可能并不表示出现故障。

⑤ 为了您的方便，本产品提供了五个**安全电源插座**供您使用。这些电源插座可用于不同型号的插头，包括在欧洲大陆（CEE7/7 和 CEE7/16）、澳大利亚（AS3112）、英国（BSI1363）、日本（JIS 8303）、以及中国（GB2099.1）所使用的插头。
注意：每种插头的额定电流应为 10A 或以下。

⑥ **电话保护器/网络端口保护器** Model Per5T-CH 是唯一型号的内置单线路（双导线）电话保护器。本公司还提供一条六英尺长的电话线。
Model Net5N-CH 是唯一型号的内置网络端口保护器（用于 10BaseT、100BaseT、100BaseTX、100BaseT4、100VG-AnyLAN、记号环接口卡和集线器）。
注意：请勿将 ISDN 线连接到 SurgeArrest 上。

⑦ 每个 SurgeArrest 都配有一个 10 Amp 的**电路断路器**，以防止电路超负荷。在超负荷情况下，按钮将会弹出。如果这种情况发生，请将至少一个设备的插头拔掉，再重新设置按钮。

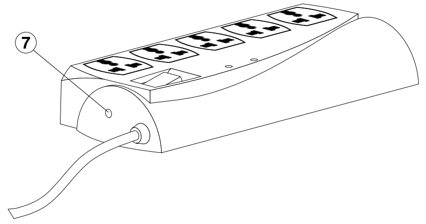

图 2

安装指令

1. 关闭电源开关 ② 。此开关上有“O” 标记的一头应该朝下。
2. 将电源线 ① 连接到 250VAC 的插座上。本公司极力推荐使用接地插座。请注意，未接地的浪涌保护器不能在电路和地之间提供有效的浪涌保护。请查看当地的法律是如何规范电器接地事宜的。
3. 将受保护电器设备的电源线连接到 SurgeArrest 上的电源插座中。
4. 如果使用 Model Per5T-CH ，请将提供的电话延长线连接到墙上的电话插孔中，将电话延长线的另一端连接到 SurgeArrest 上有“IN”标记的插孔中，以保护您的电话、传真机、或调制解调器。将您的电话机线连接到 SurgeArrest 上有“OUT”标记的插孔中。
5. 如果使用 Model Net5N-CH，请从集中器的集线器连接 LAN 电缆到 SurgeArrest 上有“IN”标记的插孔中，以保护您的本地区域网络卡。将提供的电缆的一端连接到网络卡插孔中，再将提供的电缆的另一端连接到 SurgeArrest 上有“OUT”标记的插孔中。
6. 打开 SurgeArrest 电源开关。
7. 接通连接设备的电源。

注意：“图 3 ”是安装示范图。

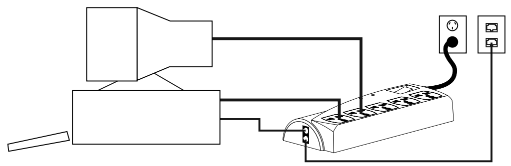

图 3

将 SurgeArrest 固定在墙壁上

SurgeArrest 在它的底部有两个固定孔，这些固定孔设计用于钩住螺丝头或钉子头。螺丝与孔中心的间距为 11.43 cm 。为获得最佳的效果，在将螺丝拧入或钉子钉入墙壁时，在墙壁和螺丝或钉子的底边之间保留大约 3.5 mm 的间距。

规格说明

除非另有其他的说明，额定值都是以 20°C 的周边环境为基础设置的。
操作温度范围：0°C 到 40°C
操作电压：250 VAC（230 VAC nom.）、50/60 Hz
操作相对湿度：0 - 95% 的非冷凝状态
安全性认可： CCEE
欲知更多的设备规格详情，请与 APC 联系。

表 1：浪涌性能额定值

参数/型号	个人系统	网络系统
电磁波/射频噪音抑制 (100kHz 到 10MHz)	15-55 dB	30-70 dB
Cat. A 标准模式允许通过 6KV 脉冲电压的百分比	<8.5%	<1.5%
全部能量容量	315J	630J
峰值浪涌电流 (8x20µs 脉冲) 标准模式	5.5kA	11kA
峰值浪涌电流 (8x20µs 脉冲) 共模模式	11kA	22kA

表 2：电话保护器额定值

参数/型号	个人系统	网络系统
工作电压	260VDC	—
峰值浪涌电流（8x20µs 脉冲）	4500A	—
电路线保护数目	1	—
连接器类型	RJ11	—
串联电阻	6-12W	—

表 3：网络保护器额定值

参数/型号	个人系统	网络系统
工作电压	—	8VDC
EIA/TIA 568 性能	—	Category 5
连接器类型	—	RJ45

有限产品保证

American Power Conversion 为 SurgeArrest 浪涌抑制器提供两年期限的有限产品保证。
APC 保证产品在正常使用下没有原料和工艺的缺陷，并为最初购买者提供两年期限的服务。本保证的义务限制在仅对有缺陷的产品进行修理或替换上。要获得保证下的服务，您必须从 APC 或 APC 服务中心获得一个返回材料授权（RMA）号码。SurgeArrest 浪涌抑制器必须与 RMA 号和已支付的运输费一同返回，而且必须附一份简洁的问题说明和购买日期及地点的证明。本保证仅适用于最初购买者。

客户服务和技术支持部门

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